



Highlights

- View all useful customer information
 - in one place, in context
 - Leverage big data produced by ever-growing “digital footprints”
 - Combine structured and unstructured data for deeper insights
 - Exceed customer expectations of service
 - Drive engagement, revenue and loyalty
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Enhanced 360-degree view of the customer

Using big data technologies to better understand and engage customers

Big data has been big news in recent years. While organizations have, to date, been busy exploring and experimenting, they are now beginning to focus on using big data technologies to solve business problems. A true 360-degree view of the customer enables businesses to turn a swell of data into precise insights to drive engagement, revenue and loyalty.

Five high-value uses for big data

IBM has conducted surveys, studied analysts’ findings, talked with more than 300 customers and prospects and implemented hundreds of big data solutions. As a result, it has identified five high-value use cases that enable organizations to gain new value from big data, as listed below:

- Big data exploration: find, visualize and understand big data to improve decision making.
- Enhanced 360-degree view of the customer: enhance existing customer views by incorporating internal and external information sources.
- Security/intelligence extension: reduce risk, detect fraud and monitor cybersecurity in real time.
- Operations analysis: analyze a variety of machine data for better business results and operational efficiency.
- Data warehouse modernization: integrate big and traditional data warehouse capabilities to gain new business insights while optimizing the existing warehouse infrastructure.

These are not intended to be sequential or prioritized. It doesn’t matter where users start; it just matters that they start. The key is to identify which use cases make the most sense for the organization given the challenges it faces.



What is an enhanced 360-degree view of the customer?

The concept of a “360-degree view of the customer” has become something of a cliché in customer relationship management circles. So let’s take it a step further: the key here is the word “enhanced.”

Alongside the advent of big data technologies, the “digital footprint” of modern consumers and business-to-business buyers is growing every day. This is raising the bar on what businesses can learn about, and how they can connect with, customers.

An enhanced 360-degree view of the customer is a holistic approach that takes into account all available and meaningful information about the customer to drive better engagement, more revenue and long-term loyalty. It presents a combination of good data governance, data access, integration and analytics in an accessible form. All this can be delivered in an IT solution that harnesses the volume, velocity and variety of big data.

Big data is changing the game for customer engagement

Big data is part of a larger trend driven by the Internet, cloud computing, mobile devices and social media, which has created a new generation of hyper-connected, hyper-aware consumers. Today’s customers are free to explore all possible sources before they commit to a product or service. They have instant access to product information, independent evaluations both from experts and through crowdsourcing websites, and advice and price options from multiple vendors.

This trend has fundamentally changed the buyer-seller relationship and raised customer expectations. Customers can access a wealth of information about sellers and their products or services; they can also find out when goods are shipped, track their shipments and receive real-time updates on delivery.

As a result, customers expect more from the professionals who sell and support products and services. Buyers today expect to interact with highly informed, highly engaged agents capable of picking up where their web experience left off and adding value.

Furthermore, marketers, managers and other decision makers have far more data to sift through and analyze to form a basis for their strategies. The abundance of data presents both challenges and opportunities for organizations.

An enhanced 360-degree view is designed to deliver the information and analytics needed to improve the way organizations deal with customers on a day-to-day basis and leverage data to make better decisions about products, services and promotions.

IBM's big data and analytics portfolio

IBM is uniquely qualified to deliver an enhanced 360-degree view of the customer with its big data platform, analytics portfolio and service offerings.

IBM® InfoSphere® BigInsights™ software builds on the open source Apache Hadoop framework to include analytics and makes it easier for the enterprise customer to deploy and manage. IBM packages open-source Hadoop in its InfoSphere BigInsights software but also includes IBM technology that is not available with open-source Hadoop distributions. InfoSphere BigInsights can be used as a queryable data store and for myriad data- and compute-intensive tasks, including advanced text analytics, in support of the enhanced 360-degree view of the customer.

See ibm.com/software/data/infosphere/biginsights

IBM's information integration and governance (IIG) offerings support the quality, accuracy and security of data throughout its lifecycle, including all forms of big data. Enhancing the 360-degree view of the customer requires an accurate and consistent view of customer and product data first.

- *InfoSphere Master Data Management* creates a “golden record” with trusted customer data. In this use case, organizations use IBM Watson™ Explorer to link unstructured content from external sources to the golden record for that enhanced 360-degree view. In addition, InfoSphere Master Data Management creates a single, up-to-date repository of product and other core information that can be used throughout an organization for strategic business initiatives. See ibm.com/software/data/information-integration-governance
- *IBM InfoSphere Information Server for Data Integration* integrates data of any complexity from diverse sources and keeps the consolidated view fresh as data changes. Whether it comes from traditional structured or new big data sources, data about customers is prone to errors and inconsistencies.
- *IBM InfoSphere Information Server for Data Quality* analyzes data, validates it against business rules, cleanses and enriches it, and monitors the ongoing quality of the data, so that the 360-degree view is based on the best available data.

IBM InfoSphere Streams is an advanced computing platform that allows user-developed applications to quickly ingest, analyze and correlate information as it arrives from real-time sources. This makes it ideal for analyzing and correlating real-time data related to customer sentiment from social media and other sources to enable faster decisions and insights based on the latest data.

See ibm.com/software/products/us/en/infosphere-streams

IBM's extensive *IBM analytics* portfolio can generate actionable insights to support customer-focused decisions and manage performance, as well as uncover hidden patterns and relationships in big data. See ibm.com/software/analytics/solutions/big-data

IBM data warehousing products are workhorses in the processing of customer data. The IBM data warehouse portfolio ranges from the advanced, innovative capabilities of IBM DB2® with BLU Acceleration, which speeds analytic workloads for databases and data warehouses, to the IBM PureData™ ready-to-run systems, which feature quick deployment and are optimized for analytics and transactional data workloads.

See ibm.com/software/data/data-warehousing

IBM consulting and implementation services help organizations get started with big data initiatives. Our skilled professionals bring years of experience to each project and can help organizations get started quickly with the right foundation and strategy.

See ibm.com/services/us/gbs/business-analytics

IBM Watson Explorer provides federated search, discovery and navigation across a wide range of applications and data sources in support of the enhanced 360-degree view of the customer. In addition, Watson Explorer provides an Application Builder framework for constructing and deploying enhanced 360-degree view applications. See <https://ibm.biz/BdRyVi>

Delivering the enhanced 360-degree view of the customer

As described above, IBM provides a platform that can help organizations to gain value from big data. Watson Explorer software is a key part of this platform. It creates a unified workspace for customer-facing professionals, marketers and other decision makers that provides an enhanced 360-degree view of customers, products and more. This solution delivers the data and analytics these users need, in context—tailored to their role and current activities.

The enhanced 360-degree view solution delivered by Watson Explorer combines structured data from enterprise systems such as customer relationship management and supply chain management, order tracking systems and customer support databases, with unstructured content from sources such as email, file shares and content management systems. Watson Explorer can also deliver data and content from external systems, such as social media and third-party information services.

The solution can combine all this data and content with analytics that are relevant to the current situation and user role. It may also incorporate InfoSphere Master Data Management to ensure it delivers only trusted data.

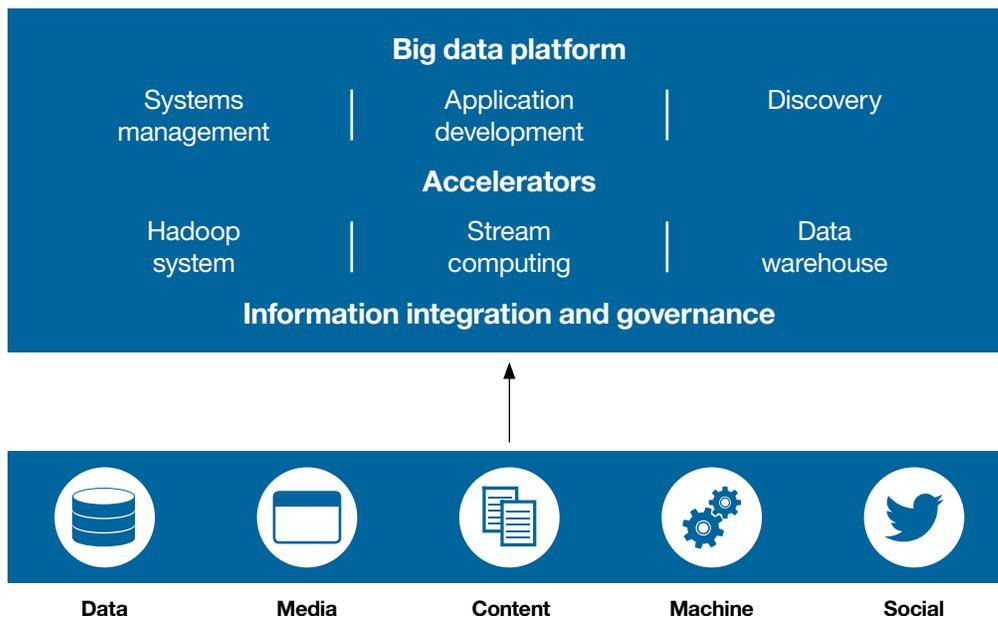


Figure 1: IBM's big data platform is integrated by design and unrivalled in the depth and breadth of capabilities it delivers.

Product recommendation based on customer's past purchases →

Trusted contact information from InfoSphere Master Data Management or a CRM system →

Associated accounts from a variety of potential sources →

Information about the contact from external sources →

Consolidated list of products owned based on current account affiliation ←

Past purchases by this contact from order tracking system ←

Recent conversations from email, CRM and other sources ←

Real-time activity feed shows new content about "followed" entities from any Watson Explorer indexed source ←

Figure 2: Example of an enhanced 360-degree view of a customer created using Watson Explorer Application Builder.

How it works

An account manager is presented with a homepage containing information about his key accounts. He can see up-to-date information about products and people he “follows” as well as alerts about changes in policy. He can read important news items about his own company and accounts, as well as analytics that relate closely to his role. A real-time activity feed shows new information about the people, products and other things he follows.

In addition to the homepage, the enhanced 360-degree view solution provides individual pages for important entities, such as customers, products, accounts and more. When the account manager clicks on a specific customer’s name, a page appears

that shows everything about that customer: what products she has bought, what support incidents have occurred recently, whether there are any blocked orders, what’s going on with the company she works for and so on. In short, the account manager receives a holistic view showing all the things he might want to know while interacting with that customer, all in one place.

If the account manager clicks on a product the customer has bought, he’ll get a 360-degree view of the product, with information pulled from many sources, such as an enterprise content management or supply chain management system, as well as information on the product manager and more.

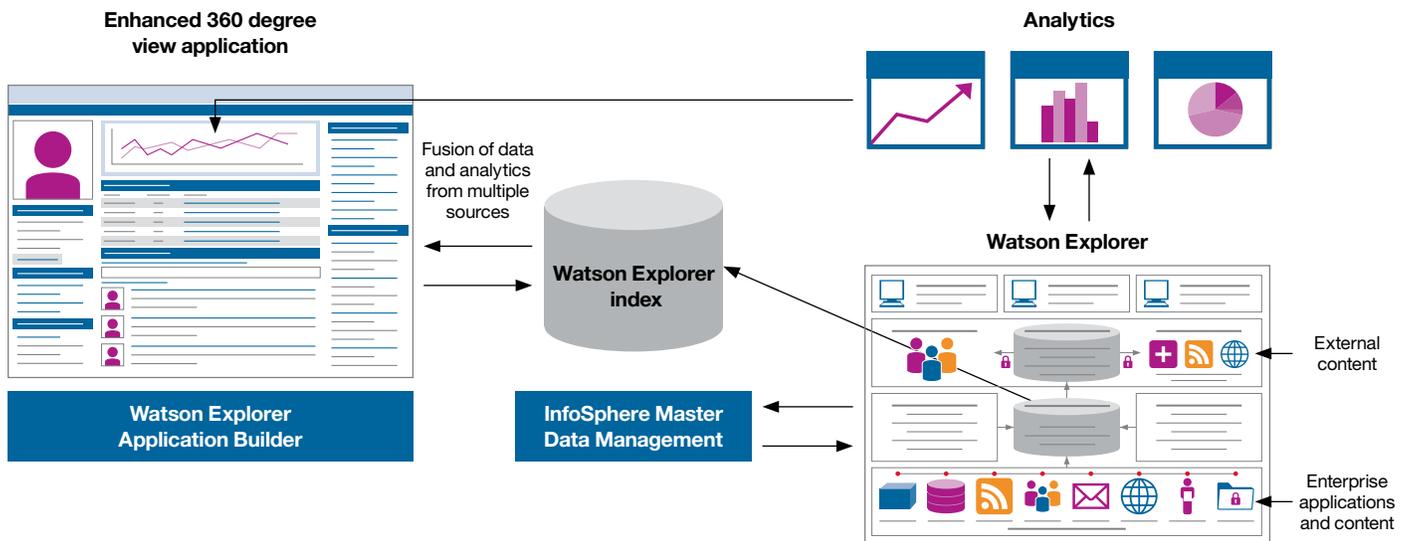


Figure 3: Applications based on the Watson Explorer Application Builder can incorporate data from both inside and outside the enterprise, as well as analytics in context.

The product page might also display reports and analytics about the product, such as sales figures or forecasts, “trending” buyer sentiment from social media, or a current inventory.

He might choose to click on the product manager’s name and explore detailed information, such as products he manages and documents he has authored.

The experience is designed to enable users to perform their jobs better. The relevant information is presented in a useful way in order to free the user from having to constantly search for information. Invisible to the user, multiple searches are executed behind the scenes to compose the view. The user is free to focus on creating a better experience for the customer, make better decisions and perform other elements of his or her job.

IBM Watson Explorer Application Builder

IBM Watson Explorer Application Builder enables rapid deployment of enhanced 360-degree view solutions that combine information and analytics from multiple sources.

- Its widget-based framework enables administrators to configure the data access and presentation layer.
- Users can select the information sources most important to their specific role and create a personalized view by arranging widgets to meet their own needs and preferences.
- Entity pages present information and analytics about people, customers, products and any other topic or entity from multiple sources in a single view.
- The activity feed enables users to follow any topic, such as a person, company or subject, and receive the most current information, as well as post comments and view comments posted by other users.

For more information on creating 360-degree view solutions with Watson Explorer, see <https://ibm.biz/howto360>

A solution for everyone

The enhanced 360-degree view isn't just for managers looking for analytics that give strategic insights into customer behavior. That is a key component, but it is important to avoid falling into the trap of treating the customer as a number or an abstraction. The purpose of customer analytics is to provide guidance on how to engage. The enhanced 360-degree view solution is designed to be used by everyone involved in customer engagement, including frontline employees.

Organizations can connect their customer-facing professionals—the ones who deal directly with customers in the call center, in person, or through social media, email or chat—with important information. This approach makes it much easier for them to engage customers, develop trusted relationships, solve customer problems and eventually up-sell and cross-sell the right products. In order to do this, they need to be able to zero in on what a particular customer needs, not spend time searching for information.

Rather than focusing on shortening every customer interaction, it is sometimes appropriate and beneficial for customer-facing professionals to spend time teaching customers to gain more value from the products they already own, thus laying the foundation for expanded business, more product sales and deeper, lasting relationships.

Do you need an enhanced 360-degree view of the customer?

If you find yourself answering “yes” to the following questions, you may need an enhanced 360-degree view of the customer:

- When employees in your organization want to view all information about a customer, product or competitor, do they have to access multiple different systems?
- Do you struggle to weigh insights about your customers from social media, surveys, support emails and call records against information from transactional systems?
- Do you struggle to combine your structured and unstructured data to run analytics and create a more consistent view of your customers?
- Is gaining a better, more comprehensive view of customers a strategic imperative for your organization?

Get in touch today to learn more about how IBM can help.



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Produced in the United States of America
June 2014

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